Figure 1.

Sequence A | Sequence B
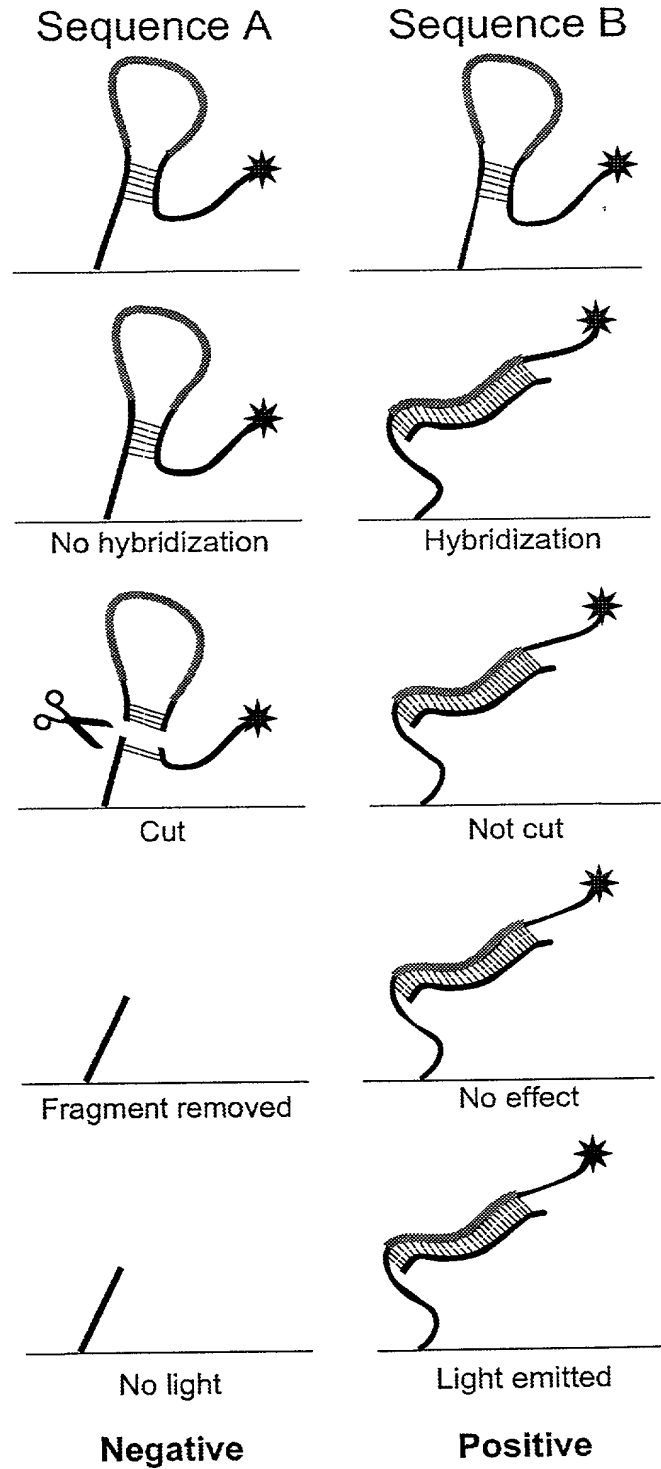
- PRL arrays are supplied with bioluminescent labels attached. The bioluminescent enzyme is shown as a star.

- Target DNA or RNA is extracted, sheared and allowed to hybridize to the array. Unhybridized target molecules are then washed away.

No hybridization | Hybridization

- A restriction enzyme is applied, cutting the probes that are not hybridized to target DNA or RNA.

Cut | Not cut

- The array is incubated at a temperature high enough to dissociate the remaining stem hydrogen bonds and the unbound labels are washed away.

Fragment removed | No effect

- When substrate is added, light is emitted only at sites where hybridization to target DNA or RNA occurred.

No light | Light emitted

Negative | **Positive**

Figure 2.